



### Key Facts about Q fever

Q fever is naturally occurring in animals across the United States and in Iowa. Goats, sheep, and cattle are most commonly reported as being infected, however, a wide variety of animals (including other species of livestock, wildlife, and domesticated pets) have also been infected. Most animals do not show signs of illness but reproductive complications have been reported in some species. For more information regarding illness in animals, please contact your veterinarian.

#### **Illness in People:**

Human cases of Q fever are identified and reported in Iowa every year. Most people who are infected report exposure to aerosolized bacteria from placentas and birth fluids of infected animals.

#### *ACUTE ILLNESS:*

Less than 50% of all people infected with Q fever bacteria become ill. Most people will have no signs, symptoms, or complications.

Of those people who do become ill, most will have one or more of the following symptoms:

- high fevers (up to 104-105° F) lasting for 1 to 2 weeks
- severe headache
- general malaise
- myalgia
- confusion
- sore throat
- chills
- sweats
- non-productive cough
- nausea
- vomiting
- diarrhea
- abdominal pain
- chest pain

Also, weight loss and pneumonia are commonly reported and some patients have liver complications.

#### *CHRONIC ILLNESS:*

Less than 1% of those who are infected will develop a more severe chronic illness, such as infection of the heart valves, liver, or kidney.

- Most people who develop chronic Q fever have underlying medical conditions that put them at higher risk, such as:
  - Heart valve disease
  - Pregnancy
  - Immunosuppressive conditions, such as cancer, HIV/AIDS, or chronic steroid treatment.
- It is recommended that anyone who is exposed to Q fever bacteria and is in one of the high risk groups be regularly monitored by their physician.

## **To reduce the risk of Q Fever infection when working around high risk animals:**

People who frequently work with high risk animals (such as goats, sheep and cattle) have likely been exposed to Q Fever in the past, and may or may not have developed symptoms at that time. Most people will recover without treatment and then will be immune. While it is important that everyone working with animals consider ways to reduce the risk of infection, it is particularly important for new workers or visitors who are not immune.

Q Fever is very difficult to prevent completely it only takes a small amount of bacteria to become infected. Here are measures that may reduce your risk of exposure and prevent exposure of others:

- 1) Wear a mask or respirator in the following situations (talk to your doctor first about whether it is safe for you to wear a respirator):
  - When assisting with an animal birth
  - When handling animal tissue, especially tissue involved in birthing such as placenta
  - During activities that create a dusty environment around high risk animals, such as
    - moving livestock
    - moving bedding material
    - clearing away manure
    - cleaning barns or animal areas
    - working with manure and mortality compost piles
    - using high pressure hoses for cleaning, as this may cause aerosolization of bacteria
- 2) Promptly and properly dispose of animal carcasses, placentas (and other birthing products), and animal tissues. The Iowa Department of Natural Resources regulates and can provide guidance on composting and disposal.
- 3) Wash your hands frequently with soap and water.
- 4) Consider using dedicated footwear to prevent spread of infectious materials (ie. footwear only used onsite that is removed prior to leaving the animal care areas).
- 5) Consider using disposable gloves when assisting with birthing or handling birthing materials. Arm guards/shields are also recommended during invasive birthing procedures.
- 6) Use eye protection such as safety glasses, goggles, or face shields when assisting with birthing to reduce exposure to splatter.
- 7) Wear protective clothing especially during higher risk activities, such as assisting with birthing and contact with birthing materials or fluids (ie. washable or disposable coveralls).
  - Change your clothes and shower as soon as possible after working with the animals or infectious materials.
  - Consider washing contaminated clothing separately from family laundry and in hot water.
- 8) If a high risk animal caretaker becomes ill, they should tell their medical provider that they work with high risk animals.

In outbreak situations additional precautions may be appropriate. Contact the Iowa Department of Public Health at 800-362-2736.

- For more information visit:
  - [www.cdc.gov/ncidod/diseases/submenus/sub\\_q\\_fever.htm](http://www.cdc.gov/ncidod/diseases/submenus/sub_q_fever.htm)
  - [http://www.cfsph.iastate.edu/Factsheets/pdfs/q\\_fever.pdf](http://www.cfsph.iastate.edu/Factsheets/pdfs/q_fever.pdf)